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NEWS 4 FEB 28 BABS - Current-awareness alerts (SDIs) available
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NEWS 6 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 8 MAR 22 KOREAPAT now updated monthly; patent information enhanced
NEWS 9 MAR 22
                 Original IDE display format returns to REGISTRY/ZREGISTRY
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                 PATDPASPC - New patent database available
NEWS 11 MAR 22
                 REGISTRY/ZREGISTRY enhanced with experimental property tags
NEWS 12 APR 04
                 EPFULL enhanced with additional patent information and new
                 fields
NEWS
      13 APR 04
                 EMBASE - Database reloaded and enhanced
NEWS
      14 APR 18
                 New CAS Information Use Policies available online
NEWS
      15 APR 25
                 Patent searching, including current-awareness alerts (SDIs),
                 based on application date in CA/CAplus and USPATFULL/USPAT2
                 may be affected by a change in filing date for U.S.
                 applications.
NEWS 16 APR 28
                 Improved searching of U.S. Patent Classifications for
                 U.S. patent records in CA/CAplus
NEWS
      17 MAY 23
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NEWS 18 MAY 23 REGISTRY has been enhanced with source information from
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NEWS 20 JUN 13
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     21 JUN 13
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                MARPAT displays enhanced with expanded G-group definitions
                 and text labels
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      23 JUL 01
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                 STN Patent Forums to be held in July 2005
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      24 JUL 07
NEWS
      25 JUL 13
                 SCISEARCH reloaded
NEWS
     26 JUL 20
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     27 AUG 11
                Derwent World Patents Index(R) web-based training during
                 August
NEWS 28 AUG 11 STN AnaVist workshops to be held in North America
NEWS EXPRESS
             JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT
             MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005
```

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=> FILE REGISTRY

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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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*

* The CA roles and document type information have been removed from the

* The CA roles and document type information have been removed from * the IDE default display format and the ED field has been added, *

10635294.trn

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

Uploading C:\Program Files\Stnexp\Queries\10635294.str

chain nodes : 12 13 14 15 16 17 ring nodes : 1 2 3 4 5 6 7 8 chain bonds : 1-12 2-13 8-12 12-17 13-14 13-15 14-16 ring bonds : 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11 1-2 1-5 exact/norm bonds : 1-2 1-5 1-12 2-3 3-4 4-5 12-17 13-14 13-15 14-16 exact bonds : 2-13 8-12 normalized bonds : 6-7 6-11 7-8 8-9 9-10 10-11 isolated ring systems : containing 1 : 6 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS

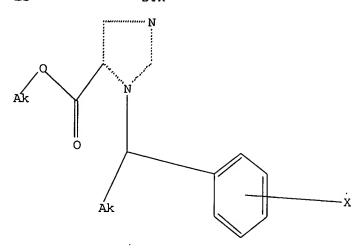
L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

Ll

STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 09:22:36 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 452 TO ITERATE

100.0% PROCESSED

452 ITERATIONS

7 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

7765 TO 10315

PROJECTED ANSWERS:

7 TO

L2

7 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 09:22:43 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9048 TO ITERATE

100.0% PROCESSED

9048 ITERATIONS

SEARCH TIME: 00.00.01

95 ANSWERS

L3

95 SEA SSS FUL L1

=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL

FULL ESTIMATED COST

ENTRY SESSION 161.33 161.54

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FILE COVERS 1907 - 16 Aug 2005 VOL 143 ISS 8 FILE LAST UPDATED: 15 Aug 2005 (20050815/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.



=> FIL REGISTRY
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 9.80 171.34

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STRUCTURE FILE UPDATES: 15 AUG 2005 HIGHEST RN 860345-00-2 DICTIONARY FILE UPDATES: 15 AUG 2005 HIGHEST RN 860345-00-2

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

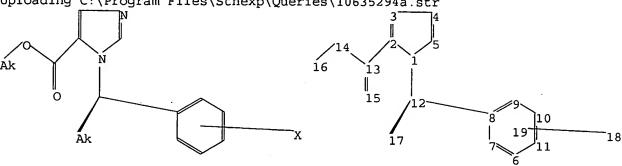
Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

http://www.cas.org/ONLINE/DBSS/registryss.html

=>

Uploading C:\Program Files\Stnexp\Queries\10635294a.str



chain nodes :

12 13 14 15 16 17 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 11

chain bonds :

1-12 2-13 8-12 12-17 13-14 13-15 14-16

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11

exact/norm bonds :

1-2 1-5 1-12 3-4 4-5 12-17 13-14 13-15 14-16

exact bonds :

2-3 2-13 8-12

normalized bonds :

6-7 6-11 7-8 8-9 9-10 10-11

isolated ring systems. :

containing 1 : 6 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS

Stereo Bonds:

17-12 (Single Wedge).

Stereo Chiral Centers:

12 (Parity=Don't Care)

Stereo RSS Sets:

Type=Relative (Default). 1 Nodes= 12

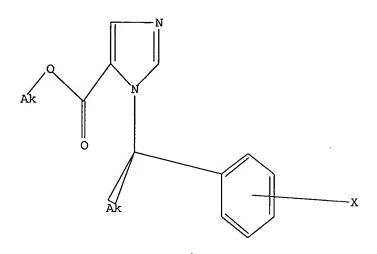
L5 STRUCTURE UPLOADED

=> d 15

10635294.trn Page 6

09:27

L5 HAS NO ANSWERS L5 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 09:25:40 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 452 TO ITERATE

100.0% PROCESSED 452 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

7765 TO 10315

PROJECTED ANSWERS:

1 TO 80

L6 1 SEA SSS SAM L5

=> s 15 sss full

FULL SEARCH INITIATED 09:25:46 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 9048 TO ITERATE

100.0% PROCESSED 9048 ITERATIONS

SEARCH TIME: 00.00.01

19 SEA SSS FUL L5

L7

=> FIL HCAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY

SESSION FULL ESTIMATED COST 161.33 332.67

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=> s 17 L8 6 L7 => d his

(FILE 'HOME' ENTERED AT 09:22:09 ON 16 AUG 2005)

FILE 'REGISTRY' ENTERED AT 09:22:20 ON 16 AUG 2005

L1 STRUCTURE UPLOADED

L2 7 S L1

L3 95 S L1 SSS FULL

(L4)

L5

FILE 'HCAPLUS' ENTERED AT 09:22:48 ON 16 AUG 2005 15 S L3

FILE 'REGISTRY' ENTERED AT 09:25:22 ON 16 AUG 2005

STRUCTURE UPLOADED

L6 . 1 S L5

L7 19 S L5 SSS FULL

(L8)

FILE 'HCAPLUS' ENTERED AT 09:25:53 ON 16 AUG 2005

=> d l4 ibib abs hitstr tot

L4 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2005 ACT ON STN

ACCESSION NUMBER:

2005:123220 HCAPLUS

DOCUMENT NUMBER:

142:198079

TITLE:

Preparation of radiolabeled 1-(phenylethyl)imidazole-5-

of more than

carboxylic acid ester derivatives

INVENTOR(S): Zolle, Ilse; Hammerschmidt, Friedrich

PATENT ASSIGNEE(S):

SOURCE:

Austria U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

10635294.trn

Page 8

08/16/2005 1

10635294.trn

US 2005033060
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):

A1 20050210 US 2003-635294 US 2003-635294 20030806 20030806

MARPAT 142:198079

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Halogenated carboxylic ester derivs. of phenylethylimidazole (I) [R1 = linear or branched C1-4 alkyl which is optionally substituted with a halogen selected from the groups consisting of F, Cl, I or Br; R2 = C1-2alkyl; X = a nonradioactive or a radioactive halogen] or (II) [X = a]nonradioactive or radioactive halogen selected from the group consisting of I, Br, and F; X = a radioactive halogen selected from the group consisting of 123I, 124I, 131I, 76Br, 82Br or 18F] are prepared via coupling of (S)-secondary alc. (III) (R2, X = same as above) with imidazolecarboxylate ester (IV) (R1 = same as above). Radio-halogenated forms of these compds. are ideally suited for positron-imaging of the adrenal glands, as it is known that these compds. demonstrate a selective and high rate of accumulation in the adrenals. The method of preparing these derivs. proceeds by the conversion of a stable, non-radioactive intermediate having trialkylstannyl leaving groups (V) [R1, R2 = same as above; L = an alkylstannyl group selected from the group consisting of trimethylstannyl, triethylstannyl, tri-n-propylstannyl and tri-n-butylstannyl] and (VI) (R1, R2 = same as above). These intermediates are efficiently converted to the corresponding halogenated forms by substitution of the trialkylstannyl group with the halogen or radiohalogen. Thus, 4-iodoacetophenone was reduced by DIBAH in toluene/Et2O at -78° to give 86% 1-(4-iodophenyl)ethanol which was esterified by chloroacetic anhydride in the presence of pyridine in CH2Cl2 at 0° for 2 h to give 91% 1-(4-iodophenyl)ethyl chloroacetate (VII). VII underwent enzymic hydrolysis in the presence of lipase SAM II in a mixture of tert-Bu Me ether and phosphate buffer at 0° for 2 h while keeping pH at 7.0 by adding 0.5 N aqueous NaOH solution to give 43% (R)-1-(4-iodophenyl)ethanol (98% ee) and 44% (S)-1-(4-iodophenyl)ethyl chloroacetate (>98% ee) (VIII). VIII was coupled with Me 3H-imidazole-4-carboxylate using triphenylphosphine and di(tert-butyl) azocarboxylate in THF at -30° to 0° over 2 .5 h to give 67% (R)-(+)-Me 3-[1-(4-iodophenyl)ethyl]-3H-imidazole-4-carboxylate (99% ee) which was refluxed with hexamethyltin in toluene at 135° for 17 h to give 96% (R)-(+)-Me 3-[1-[4-(trimethylstannyl)phenyl]ethyl]-3Himidazole-4-carboxylate (ΙΧ). ΙΧ (30 μg) was reacted with [1311]iodide in 10-20 μL 0.05 N aqueous NaOH solution, 15 μL aqueous chloramine-T solution (1

mg/mL), and 6 μL 1 N aqueous HCl solution at room temperature for 1 min to give

 $(R) - (+) - Me \ 3 - [1 - (4 - [131I] iodophenyl) ethyl] - 3H - imidazole - 4 - carboxylate (131I - MTO), i.e. II (R1 = R2 = Me, X = 131I).$

IT 813466-09-0P

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of radiolabeled (phenylethyl)imidazolecaboxylic acid ester derivs. as positron-emission imaging agents for adrenal glands)

RN 813466-09-0 HCAPLUS

IH-Imidazole-5-carboxylic acid, 1-[(1R)-1-[4-(iodo-131I)phenyl]ethyl]-,
methyl ester (9CI) (CA INDEX NAME)

08/16/2005

10635294.trn

Absolute stereochemistry. Rotation (+).

IT 813466-05-6P, (R)-(+)-Methyl 3-[1-(4-Iodophenyl)ethyl]-3H-

imidazole-4-carboxylate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of radiolabeled (phenylethyl)imidazolecaboxylic acid ester derivs. as positron-emission imaging agents for adrenal glands)

RN 813466-05-6 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[(1R)-1-(4-iodophenyl)ethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L4 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:74646 HCAPLUS

DOCUMENT NUMBER:

142:280123

TITLE:

2-Mercaptoimidazoles, a new class of potent CCR2

antagonists

AUTHOR (S):

Van Lommen, Guy; Doyon, Julien; Coesemans, Erwin;

Boeckx, Staf; Cools, Marina; Buntinx, Mieke; Hermans,

Bart; Van Wauwe, Jean

CORPORATE SOURCE:

Inflammation Research, Johnson and Johnson

Pharmaceutical Research and Development, Beerse,

B-2340, Belg.

SOURCE:

Bioorganic & Medicinal Chemistry Letters (2005),

15(3), 497-500

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER:

Elsevier B.V.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

$$C1$$
 Et
 N
 CO_2Me

The synthesis and SAR of a class of CCR2 antagonists based on a AB 2-mercaptoimidazole scaffold, e.g., I. The initial lead compound was optimized to the corresponding optical active 3,4-disubstituted analogs, which have IC50 values in the MCP-1 induced Ca-flux below 0.01 μM .

IT 112366-39-9P RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation, CCR2 antagonistic activity, and structure-activity relationship of mercaptoimidazoles using heterocyclization as the key step)

RN 112366-39-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)propyl]-2,3dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

IΤ 742107-74-0P 742107-75-1P 742107-79-5P 742107-80-8P 742107-85-3P 742107-86-4P 742107-91-1P 742107-93-3P 742107-94-4P 742107-96-6P 742107-99-9P 742108-08-3P 742108-32-3P 742108-37-8P 847447-91-0P 847447-92-1P 847447-93-2P 847447-98-7P 847447-99-8P 847448-14-0P 847448-17-3P RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation, CCR2 antagonistic activity, and structure-activity relationship of mercaptoimidazoles using heterocyclization as the key step) RN 742107-74-0 HCAPLUS

CN1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)ethyl]-2,3dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-75-1 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 742107-79-5 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-80-8 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

10635294.trn

Page 12

09:27

RN 742107-85-3 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-5-methyl-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-86-4 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

RN 742107-91-1 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & H \\ MeO-C & N \\ MeO-C & CH-Et \\ O & F \\ \end{array}$$

RN 742107-93-3 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-[4-fluoro-3-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

MeO-C CH-Et

$$F_3$$
C

 F_3 C

RN 742107-94-4 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-[4-fluoro-3-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & H & H & \\ MeO-C & N & S & \\ MeO-C & CH-Et & \\ O & CH-Et & \\ \end{array}$$

RN 742107-96-6 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 742107-99-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-[3-fluoro-4-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742108-08-3 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-[3-fluoro-4-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

- RN 742108-32-3 HCAPLUS
- CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, 5-methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & H \\ HO_2C & N \\ MeO-C & CH-Et \\ C1 & C1 \end{array}$$

- RN 742108-37-8 HCAPLUS
- CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dibromophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 847447-91-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2-chlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 847447-92-1 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3-chlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 847447-93-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-chlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & H \\ N \\ N \\ O \\ \hline \\ CH-Et \\ C1 \\ \end{array}$$

RN 847447-98-7 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,5-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & H & S \\ \hline & N & S \\ \hline & N & CH-Et \\ \hline & O & CH-ET \\ \end{array}$$

RN 847447-99-8 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,5-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 847448-14-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)-2-methoxyethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

MeO-C
$$CH-CH_2-OMe$$

RN 847448-17-3 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)-1-methylethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

IT 742107-81-9P 742107-82-0P

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(stereoselective preparation, CCR2 antagonistic activity, and structure-activity relationship of mercaptoimidazoles using asym. addition and heterocyclization as the key steps)

RN 742107-81-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[(1R)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

10635294.trn

RN 742107-82-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[(1S)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 847448-27-5P 847448-28-6P 847448-29-7P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (stereoselective preparation, CCR2 antagonistic activity, and structure-activity relationship of mercaptoimidazoles using asym. addition and heterocyclization as the key steps)

RN 847448-27-5 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[(1S)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 847448-28-6 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[(1S)-1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 847448-29-7 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[(1R)-1-(3,4-difluorophenyl)propyl]-

10635294.trn

Page 20

09:27

2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:686636 HCAPLUS

DOCUMENT NUMBER:

142:88850

TITLE:

[123/131I]iodometomidate as a radioligand for

functional diagnosis of adrenal disease: Synthesis, structural requirements and biodistribution

AUTHOR (S):

Schirbel, A. Zolle, I.; Hammerschmidt, F.; Berger, M. L.; Schiller, B. Kvaternik, H.; Reiners, Chr. Department of Nuclear Medicine, University of

Wuerzburg, Germany

CORPORATE SOURCE: SOURCE:

Radiochimica Acta (2004) 92 (4-6), 297-303

CODEN: RAACAP; ISSN: 0033-8230

PUBLISHER:

Oldenbourg Wissenschaftsverlag GmbH

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Metomidate [(R)-1-(1-phenylethyl)-1H-imidazole-5-carboxylic acid Me ester] (MTO, 1, Fig. 1) is a potent and selective inhibitor of the cytochrome P 450 enzyme system in the adrenal cortex. Labeled in the 4-position with radioiodine, (R)-4-[1311]iodometomidate, 2, [1311]IMTO has been evaluated by in-vitro studies and also ex-vivo in rats. [1311] IMTO was synthesized by oxidative radioiododestannylation using a suitable precursor which was prepared by a new stereoselective synthesis. Optimization of the labeling reaction was performed by systematic variation of the most important reaction parameters. Under optimum reaction conditions, a labeling yield of 95% was obtained. In-vitro-stability of the tracer was studied over 8 days, indicating slow deiodination (0.27%/h). Displacement studies using [1311] IMTO and rat adrenal membranes revealed the structural requirements for high affinity binding, namely an intact ester group and (R)-configuration of the radioligand. Pharmacokinetic studies in rats showed fast accumulation of [1311] IMTO in the adrenals (approx. 10% ID/q tissue) with an activity plateau for 2 h. Metabolic degradation was indicated by a steady increase of renal activity up to 4 h post injection. Based on target to non-target ratios the highest contrast for imaging of the adrenals was observed between 30 and 60 min post injection of [1311] IMTO. We conclude that SPECT using [1231] IMTO will be a promising method for the characterization of adrenal incidentalomas.

IT 813466-09-0

RL: BSU (Biological study, unclassified); BIOL (Biological study) (synthesis, structural requirements and biodistribution of [123/131I] iodometomidate as a radioligand for functional diagnosis of adrenal disease)

RN 813466-09-0 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[(1R)-1-[4-(iodo-131I)phenyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 813466-08-9P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis, structural requirements and biodistribution of [123/131I]iodometomidate as a radioligand for functional diagnosis of adrenal disease)

RN 813466-08-9 HCAPLUS

CN lH-Imidazole-5-carboxylic acid, 1-[(1R)-1-[4-(iodo-123I)phenyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 813466-05-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis, structural requirements and biodistribution of [123/1311]iodometomidate as a radioligand for functional diagnosis of adrenal disease)

RN 813466-05-6 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[(1R)-1-(4-iodophenyl)ethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT:

37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10635294.trn

Page 22

09:27

ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:675729 HCAPLUS

DOCUMENT NUMBER: 141:207206

TITLE: Preparation of mercaptoimidazoles as CCR2 receptor

antagonists for the treatment of inflammatory disease Van Lommen, Guy Rosalia Eugeen; Doyon, Julien Georges Pierre-Olivier; Van Wauwe, Jean Pierre Frans; Cools,

Marina Lucie Louise; Coesemans, Erwin

PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.

SOURCE:

PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

INVENTOR (S):

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                               KIND
                                        DATE
                                                      APPLICATION NO.
                                                       -----
                                        2004-08-19 WO 2003-EP301038
      WO 2004069809
                               A1
               AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
                PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
                KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
                FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
                BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
      WO 2004069810
                               A1
                                        20040819
                                                   WO 2004-EP957
               AE, AE, AG, AL, AL, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG,
                BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR,
                CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES,
                ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN,
                IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC,
                LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX,
                MZ, MZ, NA, NI
           RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
               BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                                      WO 2003-EP1038 A 20030203
OTHER SOURCE(S):
                              MARPAT 141:207206
```

GΙ

The invention relates to mercaptoimidazoles of formula I, N-oxides, AB pharmaceutically acceptable addition salts, quaternary amines and stereochem. isomeric forms thereof, wherein R1 is H, (cyclo)alkyl, (hetero)aryl; R2 is halo, alkyl(oxy/thio), polyhaloalkyl(oxy), cyano, aminocarbonyl, (di)(alkyl)amino, nitro, aryl(oxy); R3 and R4 are H, cyano, (hydroxy)alkyl, C(O)OR5, C(O)NR6aR6b, S(O)2NR6aR6b, C(O)R7; R5 is a defined carbon or N-heterocyclic ester group; R6a, R6b is H, alkyl, (di)(alkyl)amino(alkyl), arylamino; or NR6aR6b is a N-heterocycle; R7 is H, alk(en/yn)yl, aryl, certain substituted alkyls; n is 1-5, etc., with some limitations. The compds. have been synthesized as CCR2 receptor antagonists and found useful for the treatment and prevention of diseases, such as inflammation, which are mediated through activation of the CCR2 receptor, particularly CCR2B receptor. The invention also relates to processes for preparing the compds. and pharmaceutical compns. comprising them. Thus, compound II was prepared from 1-[4-fluoro-3-(trifluoromethyl)phenyl]-1-propanone via oxime formation, reduction, N-alkylation with Me bromoacetate, formylation and finally cyclocondensation with (CO2Me)2 and KSCN. The synthesized compds. showed inhibition of MCP-1 induced Ca-flux in human THP-1 cells with pIC50 5.6-8.2 (pIC50 = -log IC50).

IT 112366-39-9P 742107-80-8P 742108-03-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(receptor antagonist; preparation of mercaptoimidazoles as CCR2 receptor antagonists for the treatment of inflammatory disease)

RN 112366-39-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-80-8 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & H \\ N \\ N \\ S \\ CH-Et \\ \end{array}$$

RN 742108-03-8 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-dichlorophenyl)butyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

IT 91762-41-3P 92849-54-2P 112366-38-8P 112366-41-3P 742107-74-0P 742107-75-1P

742107-79-5P 742107-81-9P 742107-82-0P 742107-85-3P 742107-86-4P 742107-91-1P 742107-93-3P 742107-94-4P 742107-96-6P 742107-99-9P 742108-08-3P 742108-09-4P 742108-10-7P 742108-13-0P 742108-18-5P 742108-24-3P 742108-32-3P 742108-36-7P 742108-37-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(receptor antagonist; preparation of mercaptoimidazoles as CCR2 receptor antagonists for the treatment of inflammatory disease)

RN 91762-41-3 HCAPLUS

1H-Imidazole-4-carboxylic acid, 3-[1-(4-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & H \\ N \\ N \\ O \\ \hline \\ CH-Me \\ \hline \\ C1 \\ \end{array}$$

CN

RN 92849-54-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 112366-38-8 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3-chlorophenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 112366-41-3 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-(4-chlorophenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-74-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-75-1 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)

RN 742107-79-5 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-81-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[(1R)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 742107-82-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[(1S)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 742107-85-3 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-5-methyl-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-86-4 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & H & H & S \\ \hline MeO-C & N & S \\ \hline MeO-C & CH-Et \\ \hline C1 & C1 \\ \end{array}$$

RN 742107-91-1 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & H \\ MeO-C & N \\ MeO-C & CH-Et \\ O & F \end{array}$$

RN 742107-93-3 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-[4-fluoro-3-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742107-94-4 HCAPLUS

CN lH-Imidazole-4,5-dicarboxylic acid, 1-[1-[4-fluoro-3-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

MeO-C
$$\stackrel{\text{H}}{\underset{\text{N}}{\bigvee}}$$
 S $\stackrel{\text{MeO-C}}{\underset{\text{CH-Et}}{\bigvee}}$

RN 742107-96-6 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 742107-99-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-[3-fluoro-4-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 742108-08-3 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-[3-fluoro-4-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O & H \\
MeO-C & N \\
MeO-C & CH-Et \\
O & CF3
\end{array}$$

RN 742108-09-4 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-[4-fluoro-3-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 742108-10-7 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-[4-fluoro-3-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, 2-hydroxyethyl ester (9CI) (CA INDEX NAME)

HO-
$$CH_2$$
- CH_2 -O- C
 CH -Et
 F_3C

RN 742108-13-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-[4-fluoro-3-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, 2-(diethylamino)-2-oxoethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ \text{Et}_2\text{N} - \text{C} - \text{CH}_2 - \text{O} - \text{C} & \\ & & & \\ \text{O} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 742108-18-5 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-dibromophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

RN 742108-24-3 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-dichlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & H & \\ MeO-C & N & S \\ \hline MeO-C & CH-Me \\ \hline \\ C1 & C1 \\ \end{array}$$

RN 742108-25-4 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-[4-fluoro-3-(trifluoromethyl)phenyl]propyl]-2,3-dihydro-2-thioxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 742108-32-3 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, 5-methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & H \\ HO_2C & N \\ MeO-C & CH-Et \\ C1 & C1 \end{array}$$

RN 742108-36-7 HCAPLUS

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Page 34

09:27

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)propyl]-2,3dihydro-5-methyl-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 742108-37-8 HCAPLUS

1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dibromophenyl)propyl]-2,3-CN dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

1989:69236 HCAPLUS 110:69236

TITLE:

Comparative effects of etomidate and its fluoro analog, R 8110, on testicular, adrenal and ovarian

steroid biosynthesis

AUTHOR (S):

De Coster, R.; Wouters, W.; Beerens, D.; Haelterman,

C.; Doolaege, R.; Goeminne, N.; Krekels, M.

CORPORATE SOURCE:

Dep. Endocrinol. Oncol., Janssen Res. Found., Beerse,

B-2340, Belg.

SOURCE:

Journal of Veterinary Pharmacology and Therapeutics

(1988), 21(4), 345-53

CODEN: JVPTD9; ISSN: 0140-7783

DOCUMENT TYPE: Journal LANGUAGE:

GI

English

The effects of etomidate and its fluoro analog R 8110 (I) on adrenal, AB testicular, and ovarian steroid biosynthesis were compared in cultures of guinea pig adrenal, rat adrenal capsular, rat testicular, and rat ovarian granulosa cells. At 100 nM, etomidate inhibited the adrenal 11-hydroxylation of glucocorticoid and mineralocorticoid biosyntheses, causing a decrease in cortisol and corticosterone and an accumulation of 11-deoxycortisol and 11-deoxycorticosterone in guinea pig adrenal and rat capsular adrenal cell suspensions, resp. At higher concns. (>10-6M), etomidate also inhibited ovarian estradiol production, testicular androgen formation, and ovarian progesterone synthesis. The latter action suggests an effect on ovarian aromatase, on testicular $17\alpha/17,20$ -lyase activities, and on cholesterol side-chain cleavage. The fluoro analog R 8110 was 10-times less potent as an inhibitor of 11-hydroxylation and slightly affected progesterone formation only in adrenal cell suspensions. Testosterone production was less affected by R 8110 than by etomidate. The increase of progestins suggests that the $17\alpha/17,20$ -lyase activities are the most sensitive testicular enzymic reactions to R 8110. For inhibition of ovarian estradiol production, R 8110 was 20-times more potent than etomidate.

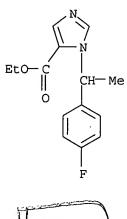
IT 109872-40-4, R 8110

RL: BIOL (Biological study)

(steroidogenesis by adrenal and ovarian and testicular cells response to)

RN 109872-40-4 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)





L4 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

10635294.trn

Page 36

09:27

AUTHOR (S):

ACCESSION NUMBER: 1988:400609 HCAPLUS

DOCUMENT NUMBER: 109:609

TITLE: Hypnoanalgesia with R 8110/fentanyl in the dog:

pharmacodynamic and pharmacokinetic interactions

Monbaliu. J.; Degryse, A. D.; Ooms, L. A. A.; Van

Dijk, P.; Lagerweij, E.; Michiels, M.; Woestenborghs,

R.; Heykants, J.

CORPORATE SOURCE: Dep. Drug Metab. Pharmacokinet., Janssen Pharm.,

Beerse, B-2340, Belg.

SOURCE: Journal of Veterinary Pharmacology and Therapeutics

(1988), 11(1), 63-70

CODEN: JVPTD9; ISSN: 0140-7783

DOCUMENT TYPE: Journal LANGUAGE: English

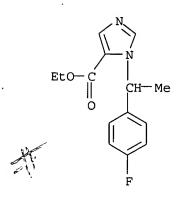
The pharmacokinetics and clin. effects of the short-acting hypnotic R 8110 and of the narcotic analgesic fentanyl were studied in the dog. The effects of sep. i.v. injections of R 8110 (4 mg/kg) and fentanyl (0.015 mg/kg) and of concurrent i.v. injection of the 2 were studied. After administration of R 8110, induction of hypnosis occurred within 1 min, maximal depth of anesthesia and satisfactory analgesia and muscle relaxation were obtained after 5 min. The effects had decreased within 15 min and full recovery occurred within 30 min. Fentanyl alone produced neither hypnosis nor muscle relaxation. When fentanyl and R 8110 were given simultaneously, the duration of hypnosis was doubled in comparison with R 8110 alone. Moreover, markedly improved and longer lasting analgesia and muscle relaxation were observed with the combination. drugs were injected together, the plasma concns. of R 8110 were initially much higher than after sep. injection of R 8110, but they became similar after 30 min. Although statistically non-significant, fentanyl reduced the total plasma clearance of R 8110 and decreased the volume of distribution. Fentanyl did not alter the elimination half-life of R 8110. R 8110 had no apparent influence on the pharmacokinetics of fentanyl.

IT 109872-40-4, R 8110 114705-71-4

RL: BIOL (Biological study) (hypnoanalgesia with, in dogs, pharmacokinetics in relation to)

RN 109872-40-4 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



HCl

RN 114705-71-4 HCAPLUS

1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, CN monohydrochloride, mixt. with N-phenyl-N-[1-(2-phenylethyl)-4piperidinyl]propanamide (9CI) (CA INDEX NAME)

CM 1

CRN 109872-40-4 CMF C14 H15 F N2 O2 . C1 H

HCl

CM

CRN 437-38-7 CMF C22 H28 N2 O

ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1988:167377 HCAPLUS

DOCUMENT NUMBER:

108:167377

TITLE:

Synthesis of (R) - (+) - 3H-etomidate

AUTHOR (S):

Janssen, Cor G. M.; Thijssen, Jos B. A.; Verluyten,

Willy L. M.; Heykants, Jozef J. P.

CORPORATE SOURCE:

Dep. Drug Metab. Pharmacokinet., Janssen Pharm.,

Beerse, B-2340, Belg.

SOURCE:

Journal of Labelled Compounds and Radiopharmaceuticals

(1987), 24(8), 909-18

CODEN: JLCRD4; ISSN: 0362-4803

10635294.trn

Page 38

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 108:167377

GI

AB Etomidate, (R)-(+)-ethyl-1-(1-phenylethyl)-1H-imidazole-5-carboxylate (I, R = H) is a short-acting hypnotic. A new synthesis, featuring optical resolution on a non-radioactive precursor and introduction of the tritium label by reductive dehalogenation of I (R = Br) is described. I (R = T) was obtained at a specific activity of 3.77 Ci/mmol and a 99.9% purity.

IT 112366-36-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and desulfurization of, with sodium nitrite)

RN 112366-36-6 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2-bromophenyl)ethyl]-2,3-dihydro-2-thioxo-; ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 112366-50-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 112366-50-4 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-bromophenyl)ethyl]-, ethyl ester, (R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 112366-49-1

CMF C14 H15 Br N2 °O2

Absolute stereochemistry.

CM 2

CRN 7664-93-9 CMF H2 O4 S

IT112366-49-1P

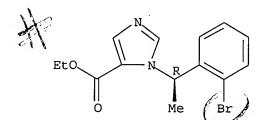
> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, reductive debromination, and tritiation of)

RN 112366-49-1 HCAPLUS

CN1H-Imidazole-5-carboxylic acid, 1-[1-(2-bromophenyl)ethyl]-, ethyl ester, (R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1988:112460 HCAPLUS

DOCUMENT NUMBER: 108:112460

TITLE: Preparation of arylalkylimidazoles as antiepileptics

INVENTOR(S): Allgeier, Hans

PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Switz. SOURCE: Eur. Pat. Appl., 40 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

> PATENT NO. KIND DATE APPLICATION NO.

10635294.trn

Page 40

EP 248414	A2	19871209	EP 1987-108017		19870603
EP 248414	A3	19880127			
EP 248414	B1	19920923			
R: AT, BE, CH	H, DE,	ES, FR, GB,	GR, IT, LI, LU, NL,	SE	
US 4851424	A	19890725	US 1987-53913		19870526
-Fs=82726	A1	19911215	IL 1987-82726		19870601
EL-8702489	Α	19871207	FI 1987-2489		19870603
AT 80876	Ε	19921015	AT 1987-108017		19870603
DK 8702892	Α	19871207	DK 1987-2892		19870604
DD 260928	A 5	19881012	DD 1987-303543		19870604
NO 8702393	Α	19871207	NO 1987-2393		19870605
NO 168103	В	19911007			
NO 168103	С	19920115			
AU 8773896	A1	19871210	AU 1987-73896		19870605
AU 610501	B2	19910523			
JP 62292763	A2	19871219	JP 1987-140124		19870605
ZA 8704042	Α	19880224	ZA 1987-4042		19870605
HU 45509	A2	19880728	HU 1987-2588		19870605
HU 207050	В	19930301			
PRIORITY APPLN. INFO.:			CH 1986-2294	A	19860606
			CH 1986-4034	A	19861009
•			EP 1987-108017	Α	19870603
GI					

The title compds. [I; R = alkyl- or halo-substituted Ph; R1, R2 = (substituted) carbamoyl, H, alkyl; R3 = H, alkyl; X = alkylene] were prepared as antiepileptics. 2,6-Difluorobenzylamine and 2-isocyano-3-dimethylaminoacrylic acid were refluxed 3 h in PhMe to give 1-(2,6-difluorobenzyl)imidazole-4-(N,N-dimethyl)carboxamide.

IT 113212-12-7P

T 113212-12-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as antiepileptic intermediate)

RN 113212-12-7 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2,6-difluorophenyl)ethyl]-, ethyl ester (9CI) (CA INDEX NAME)

IT

which are new, are useful as herbicides. NaOMe in THF was treated with HCO2Me and Me N-formyl-N-[1-(4-methylphenyl)butyl]glycine, to give I (R1 = SH, R2 = Me, Z = 4-MeC6H4, A = Pr). Pre-emergence I [R1 = H, R2 = Me, Z = Z = 2-(MeO)C6H4, A = Pr (1 kg/ha) controlled, Digitaria sanguinalis, Galium aparine and other weeds with no toxicity to corn. Dust formulations were made of I 2, SiO2, 1, and talc 97%.

2852-45-1P 2852-47-3P 2852-49-5P 2852-51-9P 2881-39-2P 84946-23-6P 91761-91-0P 91762-40-2P 91762-41-3P 92027-89-9P 92849-54-2P 109872-40-4P 112365-99-8P 112366-35-5P 112366-36-6P 112366-38-8P 112366-39-9P 112366-40-2P 112366-41-3P 112366-42-4P 112366-43-5P 112366-50-4P 112366-53-7P 112366-55-9P 112366-56-0P 112366-57-1P 112366-60-6P 112366-82-2P 112367-07-4P 112367-08-5P 112367-12-1P 112367-28-9P 112367-29-0P 112367-32-5P 112367-33-6P 112367-34-7P 112367-37-0P 112367-47-2P 112421-35-9P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as herbicide)

RN 2852-45-1 HCAPLUS

112421-37-1P

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-chlorophenyl)ethyl]-, methyl
 ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 2852-47-3 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(3-chlorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1988:51267 HCAPLUS

DOCUMENT NUMBER:

108:51267

TITLE:

Imidazolecarboxylate herbicides

INVENTOR (S):

Van Gestel, Jozef Frans Elisabe; Lutz, William R.; Van

Lommen, Guy Rosalia Eugene; Fischer, Hanspeter;

Schroven, Marc Francis Josephin; Thummel, Rudolph C.

APPLICATION NO.

DATE

PATENT ASSIGNEE(S):

Janssen Pharmaceutica N. V., Belg.

SOURCE:

Eur. Pat. Appl., 42 pp.

CODEN: EPXXDW

DATE

DOCUMENT TYPE:

Patent

LANGUAGE:

English

KIND

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

	EP 240050		A1	1987100	7 EP	1987-200390		19870304
	EP 240050		B1	1991062	6			
10	R: AT, BE,	CH, I	DΕ,	ES, FR, GB	, GR, I'	r, LI, LU, NL	, SE	
	US 4770689		Α	1988091	3 US	1986-944694		19861219
	SU 1558302		A ₃	1990041	5 SU	1987-4202079		19870303
	AT 64678		E	1991071	5 AT	1987-200390		19870304
	PL 149675		Вļ	1990033	l PL	1987-264461		19870305
	DK 8701214		Α	1987091	1 DK	1987-1214		19870309
	AU 8769831		A 1	1987091	7 AU	1987-69831		19870309
	AU 597038		B2	1990052	4			
	ZA 8701693		Α	1988102	6 ZA	1987-1693		19870309
	IL 81831		A1	1991051	2 IL	1987-81831		19870309
	CA 1289142		A1	1991091	7 CA	1987-531464		19870309
	CN 87101880		A	1987092	3 CN	1987-101880		19870310
	CN 1023317		В	1993122	9			
	JP 62277363		A2	1987120	2 JP	1987-53190		19870310
	BR 8701097		Α	1987122	9 BR	1987-1097		19870310
	HU 44405		A2	1988032	B HU	1987-1005		19870310
	HU 201451		В	1990112	8			
PRIO	RITY APPLN. INFO.	:			US	1986-838067	A	19860310
					US	1986-944694	Α	19861219
					EP	1987-200390	A	19870304

OTHER SOURCE(S):

CASREACT 108:51267

GI

AΒ The imidazolecarboxylates I [R1 = H, SH; R2 = H, alkyl, alkynyl, alkyloxyalkyl, aryl alkyl, (un)substituted Ph, etc., A = H, cycloalkyl, alkylcycloalkyl, alkyl, (un) substituted pyridinyl, pyrimidinyl, furanyl, thienyl, etc.; Z = (un)substituted thienyl, Ph, pyridinyl, etc.] some of

10635294.trn

Page 42

● HCl

RN 2852-49-5 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-chlorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 2852-51-9 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-bromophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 2881-39-2 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 84946-23-6 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-fluorophenyl)ethyl]-2,3-dihydro-2-thioxo-, ethyl ester (9CI) (CA INDEX NAME)

RN 91761-91-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-bromophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 91762-40-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 91762-41-3 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

08/16/2005

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RN 92027-89-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-fluorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H \\ N \\ S \\ O \\ C \\ C \\ C \\ C \\ C \\ H \\ F \\ \end{array}$$

RN 92849-54-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 109872-40-4 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 112365-99-8 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-chlorophenyl)butyl]-, methyl ester, 3-oxide (9CI) (CA INDEX NAME)

RN 112366-35-5 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(3-chlorophenyl)butyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 112366-36-6 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2-bromophenyl)ethyl]-2,3-dihydro-2-thioxo-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

10635294.trn

Page 48

Absolute stereochemistry.

RN 112366-38-8 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-(3-chlorophenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 112366-39-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 112366-40-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-fluorophenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 112366-41-3 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-chlorophenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 112366-42-4 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-fluorophenyl)ethyl]-2,3-dihydro-2-thioxo-, ethyl ester, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

RN 112366-43-5 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-fluorophenyl)ethyl]-2,3-dihydro-2-thioxo-, ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

RN 112366-50-4 HCAPLUS

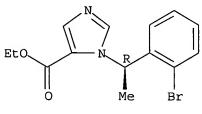
CN lH-Imidazole-5-carboxylic acid, 1-[1-(2-bromophenyl)ethyl]-, ethyl ester, (R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 112366-49-1

CMF C14 H15 Br N2 O2

Absolute stereochemistry.



#

CM 2

CRN 7664-93-9 CMF H2 O4 S

RN 112366-53-7 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2,5-dichlorophenyl)butyl]-, methyl ester, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 112366-52-6

CMF C15 H16 C12 N2 O2

CM 2

CRN 7697-37-2 CMF H N O3

RN 112366-55-9 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(3,4-dichlorophenyl)butyl]-, methyl ester, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 112366-54-8 CMF C15 H16 C12 N2 O2

CM 2

CRN 7697-37-2 CMF H N O3

RN 112366-56-0 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2,4-dichlorophenyl)butyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 112366-57-1 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2,4-dichlorophenyl)butyl]-, methyl ester, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 112366-56-0 CMF C15 H16 C12 N2 O2

CM · 2

CRN 7697-37-2 CMF H N O3 08/16/2005

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RN 112366-60-6 HCAPLUS

CN lH-Imidazole-5-carboxylic acid, 1-[1-(4-bromophenyl)ethyl]-, ethyl ester, (R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 112366-59-3

CMF C14 H15 Br N2 O2

Absolute stereochemistry.

CM 2

CRN 7664-93-9 CMF H2 O4 S

RN 112366-82-2 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, 1-methylethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 112367-07-4 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2-fluoro-5-methylphenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 112367-08-5 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(5-fluoro-2-methoxyphenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 112367-12-1 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2,4-dichlorophenyl)butyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

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Page 55

RN 112367-28-9 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-fluoro-5-methylphenyl)butyl]-, methyl ester, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 112367-27-8 CMF C16 H19 F N2 O2

CM 2

CRN 7697-37-2 CMF H N O3

CN

RN 112367-29-0 HCAPLUS

1H-Imidazole-5-carboxylic acid, 1-[1-(5-fluoro-2-methoxyphenyl)butyl]-,
methyl ester (9CI) (CA INDEX NAME)

RN 112367-32-5 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-chlorophenyl)butyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 112367-33-6 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-chlorophenyl)butyl]-, methyl ester, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 112367-32-5

CMF C15 H17 C1 N2 O2

CM 2

CRN 7697-37-2 CMF H N O3 08/16/2005 1

10635294.trn

RN 112367-34-7 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(3-chlorophenyl)butyl]-, methyl ester, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 112366-35-5

CMF C15 H17 C1 N2 O2

CM 2

CRN 7697-37-2 CMF H N O3

RN 112367-37-0 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)butyl]-, methyl ester, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 112367-36-9 CMF C15 H17 F N2 O2

CM 2

CRN 7697-37-2 CMF H N O3

RN 112367-47-2 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-chlorophenyl)butyl]-, methyl ester, mononitrate (9CI) (CA INDEX NAME)

CM 1

CRN 112367-46-1 CMF C15 H17 C1 N2 O2

CM 2

CRN 7697-37-2 CMF H N O3

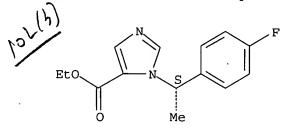
RN 112421-35-9 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, (S)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 112421-34-8 CMF C14 H15 F N2 O2

Absolute stereochemistry.



CM 2

CRN 7664-93-9 CMF H2 O4 S

RN 112421-37-1 HCAPLUS

CN lH-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, (R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 112421-36-0 CMF C14 H15 F N2 O2

Absolute stereochemistry.

10635294.trn

Page 60

CM 2

CRN 7664-93-9 H2 O4 S CMF

ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1987:568686 HCAPLUS

DOCUMENT NUMBER: 107:168686

TITLE: Comparison of the effects of etomidate and its fluoro

analog, R 8110, on plasma cortisol,

 11β -deoxycortisol, 17α -hydroxyprogesterone and testosterone concentrations in dogs

AUTHOR (S): De Coster, R.; Degryse, A. D. A. Y.; Van Dijk, P.;

Ooms, L. A. A.; Lagerweij, E. CORPORATE SOURCE: Janssen Pharm., Beerse, Belg.

SOURCE: Journal of Veterinary Pharmacology and Therapeutics

(1987), 10(3), 227-32 CODEN: JVPTD9; ISSN: 0140-7783

DOCUMENT TYPE: Journal LANGUAGE: English

GI

AB The effects of i.v. R 8110 (I), etomidate, and Ringer solution on cortisol biosynthesis by the adrenal gland was studied in male labradors. A tetracosactide challenge was carried out 30 min after the i.v. injection of 3 mg/kg of both drugs and after i.v. Ringer solution (1 mL/kg). Etomidate and R 8110 both suppressed the cortisol response tetracosactide almost completely and increased the plasma 11β -deoxycortisol levels >20-fold. Maximal 11 β -deoxycortisol values were reached 120 min after R 8110, and ≥300 min after etomidate. Plasma 17α -hydroxyprogesterone and testosterone concns. did not differ between placebo and R 8110 treatment, but they decreased after etomidate. Thus, the effects of R 8110 on steroid biosynthesis in dogs are less pronounced than those of etomidate and are largely limited to a temporary inhibition of the 11β -hydroxylase in the adrenal gland.

IT 109872-40-4, R8110

RL: BIOL (Biological study)

(steroids of blood plasma response to, etomidate in comparison with)

109872-40-4 \HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl)-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

4 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1987:526947 HCAPLUS

DOCUMENT NUMBER: 107:126947

TITLE: Clinical, cardiovascular and respiratory effects of

R8110 in premedicated dogs

AUTHOR(S): Van Dijk, P.; Degryse, A. D.; Ooms, L.; Lagerweij, E.

CORPORATE SOURCE: Inst. Vet. Anaesth., State Univ. Utrecht, Utrecht,

3508 TD, Neth.

SOURCE: Journal of Veterinary Pharmacology and Therapeutics

(1987), 10(2), 114-18

CODEN: JVPTD9; ISSN: 0140-7783

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

AB The clin., cardiovascular and respiratory effects after i.v. administration of R8110 (I) were studied in dogs. The clin. observations were made after doses of 3 and 4 mg/kg injected slowly i.v., whereas cardiovascular and respiratory studies were carried out at a dose of 3 mg/kg i.v. Induction and recovery were smooth and no significant side-effects were observed The cardiovascular system was slightly influenced, but respiration was hardly affected. The effect of premedication on respiration and the cardiovascular system was hardly potentiated by R8110. Although there were significant changes in cardiovascular and biochem. parameters, all values remained within physiol. limits. R8110 appears to be a safe and reliable induction agent.

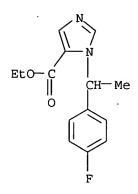
IT 109872-40-4

RL: PRP (Properties)

(anesthesia induction by and cardiovascular and respiratory effects of, in premedicated dogs)

109872-40-4 HCAPLUS RN

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



HC1

ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1987:489691 HCAPLUS

DOCUMENT NUMBER: 107:89691

TITLE: R 8110, a new short-acting hypnotic in dogs

AUTHOR (S): Van Dijk, P.; Degryse, A. D.; Ooms, L. A. A.;

Lagerweij, E.

CORPORATE SOURCE: . Univ. Vet. Anaesth., State Univ. Utrecht, Utrecht,

Neth.

SOURCE: Research in Veterinary Science (1987), 42(2), 200-3

CODEN: RVTSA9; ISSN: 0034-5288

DOCUMENT TYPE: Journal

LANGUAGE: English

GI.

AB The clin., respiratory and cardiovascular effects of i.v. injections of R 8110, (I) (3 or 4 mg/kg, i.v.) were studied in unpremedicated dogs. The drug proved to be a safe and reliable agent for induction and produced a short-lasting hypnosis and some analgesia. Both induction and recovery were smooth and rapid. Heart rate and systolic and diastolic blood pressure decreased 10 min after injection; the influence on arterial blood parameters was minimal.

IT 109872-40-4

RL: BIOL (Biological study)

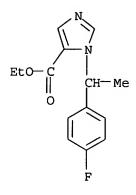
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Page 63

(cardiovascular and respiratory)

RN 109872-40-4 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



HCl

ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1976:59308 HCAPLUS

DOCUMENT NUMBER: 84:59308

TITLE: Synthesis of tritium-labeled etomidate and resolution

into its enantiomers

AUTHOR (S): Heykants, J. J. P.; Knaeps, A. G.; Janssen, M. A. C.

CORPORATE SOURCE: Dep. Drug Metab., Janssen Pharm., Beerse, Belg. SOURCE:

Journal of Labelled Compounds (1975), 11(3), 401-7

CODEN: JLCAAI; ISSN: 0022-2135 DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB (\pm) -Etomidate-2-T[(\pm) -I] a short-acting hypnotic, was prepared by tritiation of the 2-chloro Et ester and subsequent hydrolysis and resolved

into both enantiomers by salt formation with (R)-(+) and

(S) - (-) - PhCHMeNH2.

IT 58294-52-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(tritiation of)

RN 58294-52-3 HCAPLUS

1H-Imidazole-5-carboxylic acid, 1-[1-(2-chlorophenyl)ethyl]-, methyl ester CN (CA INDEX NAME)

```
ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        1966:447732 HCAPLUS
DOCUMENT NUMBER:
                         65:47732
ORIGINAL REFERENCE NO.:
                         65:8921e-h,8922a-b
TITLE:
                         Imidazolecarboxylates
PATENT ASSIGNEE(S):
                         Janssen Pharmaceutica N.V.
SOURCE:
                         20 pp.
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Unavailable
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                    DATE
     -----
                         ----
                                -----
                                           -----
     BE 662474
                                19651014
PRIORITY APPLN. INFO.:
                                            US
                                                                    19640416
     For diagram(s), see printed CA Issue.
AB
     The title compds. (I) are used as hypnotics and anticonvulsants which do
     not influence breathing. They are prepared by oxidation with HNO3 of
     2-mercapto-5-imidazolecarboxylates, which in turn are prepared by
     condensation of N-acetyl-C-formylglycine enol ester (or alkali salts) with
     HCNS (Jones, CA 43, 3411a). Thus, a mixture of dl-1-phenylethylamine 132,
     Et3N 110, HCON-Me2 100, and ClCH2CO2Et 133.5 parts is stirred overnight at
     45° to give dl-N-(ethoxycarbonylmethyl)-1-phenylethylamine (II).
     II, HCO2H 55.2, and xylene 480 parts is refluxed until the calculated amount of
     H2O has separated to yield dl-N-formyl-N-(ethoxycarbonylmethyl)-1-
     phenylethylamine (III), b3 165-70°. The following d1-OHC NRCH2CO2Et were similarly prepared (R and b.p./mm. given): CHEtPh,
     147-57°/2; CHPrPh, 185-8°/4; CHMeC6H4F-p, 185-92°/8;
     CHMeC6H4Cl-o, 154-60°/0.4; CHMeC6H4Cl-m, 160-6°/0.22;
     CHMeC6H4Cl-p, 170-3°/4; CHMeC6H4Br-p, 184-200/2; CHMeC6H4Me-p,
     183-5°/4-5; CHMeC6H3Me2-3,4, 153-6°/0.4; CHMeC6H4OMe-p,
     190-2°/2; 2-thienylethyl, 145-8°/0.5; 2-pyridylethyl,
     154-8°/0.4; 3-pyridylethyl, 174-9°/0.3-0.4; 4-pyridylethyl,
     175-80°/0.6. A mixture of 29.9 parts 50% Na dispersion in paraffin
     oil and 300 parts tetrahydrofuran (IV) is stirred at 40°, MeOH 16
     and IV 75 parts added, the mixture stirred 1 hr. at 40°, cooled to
     10°, 144 parts III in 108 parts HCO2Me added, stirred overnight at
     room temperature, concentrated in vacuo, and Et20 800 and H20 700 parts added.
     aqueous layer is separated, diluted to 1000 parts, HCl 114 parts added,
stirred 15
     min. at 40°, KCNS 90 in H2O 90 parts, added dropwise, stirred 3
     hrs. at 40°, and overnight at room temperature to yield
     dl-1-(1-phenylethyl)-2-mercapto-5-(methoxycarbonyl)imidazole (V), m.
     131-4°. Also prepared were the following d1-I (R1 = SH, R2 = Me)
     (Ar, R, and m.p. given): Ph, Me, 131-4°; Ph, Et, 209-10°;
     Ph, Pr, 175-7°; C6H4F-p, Me, 134-6°; C6H4Cl-o, Me,
     183.5-6.5°; C6H4Cl-m, Me, 170-3°; C6H4Cl-p, Me,
     161-2°; C6H4Br-p, Me, 157-61°; C6H4Me-p, Me, 163-5°;
     C6H3Me2-3,4, Me, 136-8°; C6H4OMe-p, Me, 139.5-41°;
     2-thienyl, Me, 162-4°; 2-pyridyl, Me, -; 3-pyridyl, Me,
     201-2°; 4-pyridyl, Me, 181-4°; Ph, Me, 129.8-30.8°.
     To a mixture of 80 parts HNO3 (d. 1.37) and 200 parts H2O is added 0.5 parts
     NaNO2 at 25°, the temperature raised to 35° and 66 parts V added
     in portions to yield dl-1- (1-phenylethyl)-5-(methoxycarbonyl)imidazole-
     HCl, m. 173-4°. Also prepared were the following HCl salts of dl-I
     (R1 = H) (Ar, R, R2, and m.p. given): Ph, Me, Me, 173-4°; Ph, Et,
     Me, 167-8.5°; Ph, Pr, Me, 150.5-52°; C6H4F-p, Me, Me,
```

174-5.5°; C6H4Cl-o, Me, Me, 181-3°; C6H4Cl-m, Me, Me, 151-3.5°; C6H4Cl-p, Me, Me, 147-8°; C6H4Br-p, Me, Me, 137-9°; C6H4Me-p, Me, Me, .167-8°; C6H4Me2-3,4, Me, Me, 166-7°; C6H4OMe-p, Me, Me, 129.5-30.5°; 2-thienyl, Me, Me, 135.5-38°; 2-pyridyl, Me, Me, 183.5-86.5°; 3-pyridyl, Me, Me, 178-89° (decomposition); 4-pyridyl, Me, Me, 79-80°; Ph, Me, Et, 142-2.8°; Ph, Me, H, 187-9°; Ph, Me, Cl, 161-263° (decomposition); Ph, Me, allyl, 134-6°; Ph, Me, propynyl, 92-3°; Ph, Me, Bu, 139-41°; Ph, Me, Am, 139-40°; Ph, Me, CH2OMe, 112-14°; Ph, Me, Pr, 156-70°; Ph, Me, CH2CH2Cl, 83.5-85°; Ph, Et, H, 85-95°; Ph, Et, Et, 169-70.5°. IT 2852-45-1, Imidazole-5-carboxylic acid, 1-(p-chloro- α methylbenzyl)-, methyl ester, hydrochloride, (\pm) - 2852-47-3, Imidazole-5-carboxylic acid, 1-(m-chloro- α -methylbenzyl)-, methyl ester, hydrochloride, (\pm) - 2852-49-5, Imidazole-5-carboxylic acid, $1-(o-chloro-\alpha-methylbenzyl)$ -, methyl ester, hydrochloride, (\pm) - 2852-51-9, Imidazole-5-carboxylic acid, $1-(p-bromo-\alpha-methylbenzyl)-$, methyl ester, hydrochloride, (\pm) -**2881-39-2**, Imidazole-5-carboxylic acid, 1-(p-fluoro- α methylbenzyl)-, methyl ester, hydrochloride, (\pm) - 91761-91-0, Imidazole-5-carboxylic acid, 1-(p-bromo- α -methylbenzyl)-2-mercapto-, methyl ester, (\pm) - 91762-40-2, Imidazole-5-carboxylic acid, 1-(o-chloro- α -methylbenzyl)-2-mercapto-, methyl ester, (±)-91762-41-3, Imidazole-5-carboxylic acid, 1-(p-chloro- α methylbenzyl)-2-mercapto-, methyl ester, (\pm) - 92027-89-9, Imidazole-5-carboxylic acid, 1-(p-fluoro-α-methylbenzyl)-2-mercapto-, methyl ester, (±)- 92849-54-2, Imidazole-5-carboxylic acid, $1-(m-chloro-\alpha-methylbenzyl)-2-mercapto-, methyl ester, (±)-$ (preparation of) RN 2852-45-1 HCAPLUS CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-chlorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 2852-47-3 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(3-chlorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 2852-49-5 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-chlorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 2852-51-9 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-bromophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 2881-39-2 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 91761-91-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-bromophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

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RN 91762-40-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 91762-41-3 HCAPLUS

CN lH-Imidazole-4-carboxylic acid, 3-[1-(4-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H & S \\ \hline N & S \\ \hline O & CH-Me \\ \hline \end{array}$$

RN 92027-89-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-fluorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

10635294.trn

Page 69

RN 92849-54-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & H \\ N \\ N \\ S \\ CH-Me \\ \end{array}$$

L4 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1965:58908 HCAPLUS

DOCUMENT NUMBER: 62:58908
ORIGINAL REFERENCE NO.: 62:10428d-e

TITLE: DL-1-(1-(Arylalkyl)imidazole-5-carboxylate esters. A

novel type of hypnotic agents

AUTHOR(S): Godefroi, Erik F.; Janssen, Paul A. J.; van der

Eycken, Cyriel A. M.; van Heertum, Albert H. M. T.;

Niemegeers, Carlos J. E.

CORPORATE SOURCE: Janssen Pharm., Beerse, Belg.

SOURCE: Journal of Medicinal Chemistry (1965), 8(2), 220-3

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal LANGUAGE: English

AB A number of 1-substituted imidazole-5-carboxylic acid esters (I) have been synthesized. Many of these are extremely potent, rapid, and short-acting hypnotic agents in rats.

IT 2852-45-1, Imidazole-5-carboxylic acid, 1-(p-chloro-αmethylbenzyl)-, methyl ester, hydrochloride 2852-47-3,
Imidazole-5-carboxylic acid, 1-(m-chloro-α-methylbenzyl)-, methyl
ester, hydrochloride 2852-49-5, Imidazole-5-carboxylic acid,
1-(o-chloro-α-methylbenzyl)-, methyl ester, hydrochloride
2852-51-9, Imidazole-5-carboxylic acid, 1-(p-bromo-αmethylbenzyl)-, methyl ester, hydrochloride 2881-39-2,
Imidazole-5-carboxylic acid, 1-(p-fluoro-α-methylbenzyl)-, methyl

● HCl

RN 2852-47-3 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(3-chlorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 2852-49-5 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-chlorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 2852-51-9 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-bromophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 2881-39-2 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 91761-91-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-bromophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 91762-40-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 91762-41-3 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-chlorophenyl)ethyl]-2,3-dihydro-2-

10635294.trn

Page 73

08/16/2005 10635294.trn

thioxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} H \\ N \\ S \\ N \\ CH-Me \\ \end{array}$$

RN 92027-89-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(4-fluorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

RN 92849-54-2 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(3-chlorophenyl)ethyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

=> d l6 ibib abs hitstr tot

08/16/2005 10635294.trn

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:n

=> d his

(FILE 'HOME' ENTERED AT 09:22:09 ON 16 AUG 2005)

FILE 'REGISTRY' ENTERED AT 09:22:20 ON 16 AUG 2005

L1 STRUCTURE UPLOADED

L2 7 S L1

L3 95 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 09:22:48 ON 16 AUG 2005

L4 15 S L3

FILE 'REGISTRY' ENTERED AT 09:25:22 ON 16 AUG 2005

L5 STRUCTURE UPLOADED

L6 1 S L5

L7 19 S L5 SSS FULL

FILE 'HCAPLUS' ENTERED AT 09:25:53 ON 16 AUG 2005

L8 6 S L7

=> d 18 ibib abs hitstr tot

ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2005 AGS On STN

Patent

English

ACCESSION NUMBER: 2005:123220 HCAPูษ์ซ์ร์

DOCUMENT NUMBER:

142:198079

TITLE:

Preparation of radiolabeled 1-(phenylethyl)imidazole-5-

carboxylic acid ester derivatives

INVENTOR(S): Zolle, Ilse; Hammerschmidt, Friedrich Austria

PATENT ASSIGNEE(S):

SOURCE:

U-S-Pat. Appl. Publ., 15 pp.

GÓDEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	AP	PLICATION NO.	DATE
US 2005033060	A1	20050210	US	2003-635294	20030806
PRIORITY APPLN. INFO.:		The same of the sa	US	2003-635294	20030806
OTHER SOURCE(S):	MARPAT	142:198079			

GI

AB Halogenated carboxylic ester derivs. of phenylethylimidazole (I) [R1 = linear or branched C1-4 alkyl which is optionally substituted with a halogen selected from the groups consisting of F, Cl, I or Br; R2 = C1-2 $alkyl; X = a nonradioactive or a radioactive halogen] or (II) {X = a}$ nonradioactive or radioactive halogen selected from the group consisting of I, Br, and F; X = a radioactive halogen selected from the group consisting of 123I, 124I, 131I, 76Br, 82Br or 18F] are prepared via coupling of (S)-secondary alc. (III) (R2, X = same as above) with

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

imidazolecarboxylate ester (IV) (R1 = same as above). Radio-halogenated forms of these compds. are ideally suited for positron-imaging of the adrenal glands, as it is known that these compds. demonstrate a selective and high rate of accumulation in the adrenals. The method of preparing these derivs. proceeds by the conversion of a stable, non-radioactive intermediate having trialkylstannyl leaving groups (V) [R1, R2 = same as above; L = an alkylstannyl group selected from the group consisting of trimethylstannyl, triethylstannyl, tri-n-propylstannyl and tri-n-butylstannyl] and (VI) (R1, R2 = same as above). These intermediates are efficiently converted to the corresponding halogenated forms by substitution of the trialkylstannyl group with the halogen or radiohalogen. Thus, 4-iodoacetophenone was reduced by DIBAH in toluene/Et20 at -78° to give 86% 1-(4-iodophenyl)ethanol which was esterified by chloroacetic anhydride in the presence of pyridine in CH2Cl2 at 0° for 2 h to give 91% 1-(4-iodophenyl)ethyl chloroacetate (VII). VII underwent enzymic hydrolysis in the presence of lipase SAM II in a mixture of tert-Bu Me ether and phosphate buffer at 0° for 2 h while keeping pH at 7.0 by adding 0.5 N aqueous NaOH solution to give 43% (R)-1-(4-iodophenyl) ethanol (98% ee) and 44% (S)-1-(4-iodophenyl) ethyl chloroacetate (>98% ee) (VIII). VIII was coupled with Me 3H-imidazole-4-carboxylate using triphenylphosphine and di(tert-butyl) azocarboxylate in THF at -30° to 0° over 2 .5 h to give 67% (R)-(+)-Me 3-[1-(4-iodophenyl)ethyl]-3H-imidazole-4-carboxylate (99% ee) which was refluxed with hexamethyltin in toluene at 135° for 17 h to give 96% (R)-(+)-Me 3-[1-[4-(trimethylstannyl)phenyl]ethyl]-3Himidazole-4-carboxylate (IX). IX (30 μg) was reacted with [131I]iodide in 10-20 μ L 0.05 N aqueous NaOH solution, 15 μ L aqueous chloramine-T solution

(1 $\,$ mg/mL), and 6 μL 1 N aqueous HCl solution at room temperature for 1 min to give

(R)-(+)-Me 3-[1-(4-[131I]iodophenyl)ethyl]-3H-imidazole-4-carboxylate (131I-MTO), i.e. II (R1 = R2 = Me, X = 131I).

IT 813466-09-0P

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of radiolabeled (phenylethyl)imidazolecaboxylic acid ester derivs. as positron-emission imaging agents for adrenal glands)

RN 813466-09-0 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[(1R)-1-[4-(iodo-131I)phenyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 813466-05-6P, (R)-(+)-Methyl 3-[1-(4-Iodophenyl)ethyl]-3Himidazole-4-carboxylate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of radiolabeled (phenylethyl)imidazolecaboxylic acid ester derivs. as positron-emission imaging agents for adrenal glands)

10635294.trn

RN 813466-05-6 HCAPLUS

Absolute stereochemistry. Rotation (+).

L8 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:74646. HCAPLUS

DOCUMENT NUMBER:

142:280123

TITLE:

2-Mercaptoimidazoles, a new class of potent CCR2

antagonists

AUTHOR (S):

Van Lommen, Guy; Doyon, Julien; Coesemans, Erwin;

Boeckx, Staf; Cools, Marina; Buntinx, Mieke; Hermans,

Bart; Van Wauwe, Jean

CORPORATE SOURCE:

Inflammation Research, Johnson and Johnson

Pharmaceutical Research and Development, Beerse,

B-2340, Belq.

SOURCE:

Bioorganic & Medicinal Chemistry Letters (2005)

15(3), 497-500

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER:

Elsevier B.V.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

$$C1$$
 Et
 HS
 N
 CO_2Me

The synthesis and SAR of a class of CCR2 antagonists based on a 2-mercaptoimidazole scaffold, e.g., I. The initial lead compound was optimized to the corresponding optical active 3,4-disubstituted analogs, which have IC50 values in the MCP-1 induced Ca-flux below 0.01 μ M.

IT 742107-81-9P 742107-82-0P

RL: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent).

(stereoselective preparation, CCR2 antagonistic activity, and structure-activity relationship of mercaptoimidazoles using asym. addition and heterocyclization as the key steps)

RN 742107-81-9 HCAPLUS

10635294.trn

Page 77

Ι

08/16/2005 10635294.trn

CN 1H-Imidazole-4-carboxylic acid, 3-[(1R)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 742107-82-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[(1S)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

$$\begin{array}{c|c} H & Cl \\ N & S \\ \hline \\ O & Et \\ \end{array}$$

IT 847448-27-5P 847448-28-6P 847448-29-7P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (stereoselective preparation, CCR2 antagonistic activity, and structure-activity relationship of mercaptoimidazoles using asym. addition and heterocyclization as the key steps)

RN 847448-27-5 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[(1S)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 847448-28-6 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[(1S)-1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

10635294.trn

Page 78

Absolute stereochemistry.

847448-29-7 HCAPLUS RN

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[(1R)-1-(3,4-difluorophenyl)propyl]-2,3-dihydro-2-thioxo-, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN L8

ACCESSION NUMBER:

CORPORATE SOURCE:

2004:686636 HCAPLUS

DOCUMENT NUMBER:

142:88850

TITLE:

[123/131I]iodometomidate as a radioligand for

functional diagnosis of adreral disease: Synthesis,

structural requirements and biodistribution

AUTHOR (S):

Schirfel, A.; Zolle, I.; Hammerschmidt, F.; Berger, M.

L.; Schiller, D.; Kwaternik, H.; Reiners, Chr. Department of Nuclear Medicine, University of

Wuerzburg, Germany

SOURCE:

Radiochimica Acta (2004) 92-(4-6), 297-303

CODEN: RAACAP; ISSN: 0033-8230

PUBLISHER:

Oldenbourg Wissenschaftsverlag GmbH

DOCUMENT TYPE:

Journal

LANGUAGE: English

Metomidate [(R)-1-(1-phenylethyl)-1H-imidazole-5-carboxylic acid Me ester] (MTO, 1, Fig. 1) is a potent and selective inhibitor of the cytochrome P 450 enzyme system in the adrenal cortex. Labeled in the 4-position with radioiodine, (R)-4-[1311]iodometomidate, 2, [1311]IMTO has been evaluated by in-vitro studies and also ex-vivo in rats. [1311] IMTO was synthesized by oxidative radioiododestannylation using a suitable precursor which was prepared by a new stereoselective synthesis. Optimization of the labeling reaction was performed by systematic variation of the most important reaction parameters. Under optimum reaction conditions, a labeling yield of 95% was obtained. In-vitro-stability of the tracer was studied over 8

days, indicating slow deiodination (0.27%/h). Displacement studies using [1311] IMTO and rat adrenal membranes revealed the structural requirements for high affinity binding, namely an intact ester group and (R)-configuration of the radioligand. Pharmacokinetic studies in rats showed fast accumulation of [1311] IMTO in the adrenals (approx. 10% ID/g tissue) with an activity plateau for 2 h. Metabolic degradation was indicated by a steady increase of renal activity up to 4 h post injection. Based on target to non-target ratios the highest contrast for imaging of the adrenals was observed between 30 and 60 min post injection of [1311] IMTO. We conclude that SPECT using [1231] IMTO will be a promising method for the characterization of adrenal incidentalomas.

IT 813466-09-0

RL: BSU (Biological study, unclassified); BIOL (Biological study) (synthesis, structural requirements and biodistribution of [123/1311] iodometomidate as a radioligand for functional diagnosis of adrenal disease)

RN 813466-09-0 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[(1R)-1-[4-(iodo-131I)phenyl]ethyl]-,
methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 813466-08-9P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis structural requirements and biodistribution of

(synthesis, structural requirements and biodistribution of [123/131I]iodometomidate as a radioligand for functional diagnosis of adrenal disease)

RN 813466-08-9 HCAPLUS

CN lH-Imidazole-5-carboxylic acid, 1-[(1R)-1-[4-(iodo-123I)phenyl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 813466-05-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis, structural requirements and biodistribution of [123/131I] iodometomidate as a radioligand for functional diagnosis of adrenal disease)

RN 813466-05-6 HCAPLUS

1H-Imidazole-5-carboxylic acid, 1-[(1R)-1-(4-iodophenyl)ethyl]-, methyl (CA INDEX NAME) ester (9CI)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT:

DOCUMENT NUMBER:

37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:675729 HCAPLUS

141:207206

TITLE:

Preparation of mercaptoimidazoles as CCR2 receptor antagonists for the treatment of inflammatory disease

INVENTOR(S): Van Lommen, Guy Rosalia Eugeen; Doyon, Julien Georges

Pierre-Olivier; Van Wauwe, Jean Pierre Frans; Cools,

Marina Lucie Louise; Coesemans, Erwin

Janssen Pharmaceutica N.V., Belg.

PATENT ASSIGNEE(S):

PCT Int. Appl., 64 pp.

SOURCE: CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KIND		DATE			APPLICATION NO.					DATE				
WO	WO 2004069809		A1 2004-0819		1	WO 2003-EP301038					20030203						
	W:	ΑE,	AG,	AL,	AM,	AT	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN.
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		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
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PRIORITY APPLN. INFO.:

WO 2003-EP1038

A 20030203

OTHER SOURCE(S):

MARPAT 141:207206

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The invention relates to mercaptoimidazoles of formula I, N-oxides, AB pharmaceutically acceptable addition salts, quaternary amines and stereochem. isomeric forms thereof, wherein R1 is H, (cyclo)alkyl, (hetero)aryl; R2 is halo, alkyl(oxy/thio), polyhaloalkyl(oxy), cyano, aminocarbonyl, (di)(alkyl)amino, nitro, aryl(oxy); R3 and R4 are H, cyano, (hydroxy)alkyl, C(O)OR5, C(O)NR6aR6b, S(O)2NR6aR6b, C(O)R7; R5 is a defined carbon or N-heterocyclic ester group; R6a, R6b is H, alkyl, (di)(alkyl)amino(alkyl), arylamino; or NR6aR6b is a N-heterocycle; R7 is H, alk(en/yn)yl, aryl, certain substituted alkyls; n is 1-5, etc., with some limitations. The compds. have been synthesized as CCR2 receptor antagonists and found useful for the treatment and prevention of diseases, such as inflammation, which are mediated through activation of the CCR2 receptor, particularly CCR2B receptor. The invention also relates to processes for preparing the compds. and pharmaceutical compns. comprising them. Thus, compound II was prepared from 1-[4-fluoro-3-(trifluoromethyl)phenyl]-1-propanone via oxime formation, reduction, N-alkylation with Me bromoacetate, formylation and finally cyclocondensation with (CO2Me)2 and KSCN. The synthesized compds. showed inhibition of MCP-1 induced Ca-flux in human THP-1 cells with pIC50 5.6-8.2 (pIC50 = $-\log$ IC50).

IT 742107-81-9P 742107-82-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(receptor antagonist; preparation of mercaptoimidazoles as CCR2 receptor antagonists for the treatment of inflammatory disease)

RN 742107-81-9 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[(1R)-1-(3,4-dichlorophenyl)propyl]-2,3-dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 742107-82-0 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[(1S)-1-(3,4-dichlorophenyl)propyl]-2,3dihydro-2-thioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1988:167377 HCAPLUS

DOCUMENT NUMBER:

108:167377

TITLE:

Synthesis of (R) - (+) - 3H-etomidate

AUTHOR (S):

Janssen, Cor G. M.; Thijssen, Jos B. A.; Verluyten,

Willy L. M.; Heykants, Jozef J. P.

CORPORATE SOURCE:

Dep. Drug Metab. Pharmacokinet., Janssen Pharm.,

Beerse, B-2340, Belg.

SOURCE:

GI

Journal of Labelled Compounds and Radiopharmaceuticals

(1987), 24(8), 909-18 CODEN: JLCRD4; ISSN: 0362-4803

DOCUMENT TYPE:

LANGUAGE:

Journal

English

OTHER SOURCE(S):

CASREACT 108:167377

CO2Et

Etomidate, (R)-(+)-ethyl-1-(1-phenylethyl)-1H-imidazole-5-carboxylate (I, AΒ R = H) is a short-acting hypnotic. A new synthesis, featuring optical resolution on a non-radioactive precursor and introduction of the tritium label by reductive dehalogenation of I (R = Br) is described. I (R = T)

10635294.trn

Page 83

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08/16/2005 10635294.trn

was obtained at a specific activity of 3.77 Ci/mmol and a 99.9% purity.

IT 112366-36-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and desulfurization of, with sodium nitrite)

RN 112366-36-6 HCAPLUS

CN 1H-Imidazole-4-carboxylic acid, 3-[1-(2-bromophenyl)ethyl]-2,3-dihydro-2-thioxo-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 112366-50-4P

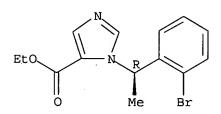
RN 112366-50-4 HCAPLUS

CN 1H-Imidazole-5-carboxylic acid, 1-[1-(2-bromophenyl)ethyl]-, ethyl ester, (R)-, sulfate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 112366-49-1 CMF C14 H15 Br N2 O2

Absolute stereochemistry.



CM 2

CRN 7664-93-9 CMF H2 O4 S

IT 112366-49-1P

10635294.trn

Page 84

08/16/2005

10635294.trn

Absolute stereochemistry.

CM 2

CRN 7664-93-9 CMF H2 O4 S

RN112421-35-9 HCAPLUS

CN1H-Imidazole-5-carboxylic acid, 1-[1-(4-fluorophenyl)ethyl]-, ethyl ester, (S)-, sulfate (1:1) (9CI) (CA INDEX NAME)

. CM 1

> CRN 112421-34-8 CMF C14 H15 F N2 O2

Absolute stereochemistry.

CM

CRN 7664-93-9 CMF H2 O4 S

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